

PHOTOGRAPHIC INTERPRETATION REPORT

ARGAYASH THERMAL ELECTRIC POWER PLANT,  
KYSHTYM ATOMIC ENERGY COMPLEX, USSR,  
[REDACTED]

25X1D



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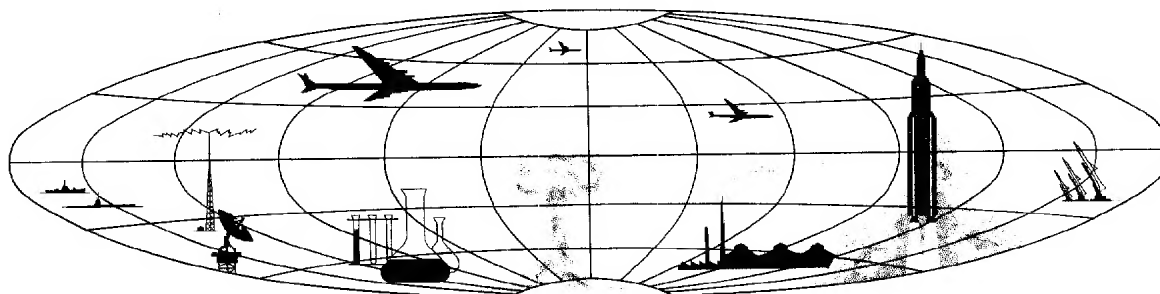
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WARNING

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**TOP SECRET**

ARGAYASH THERMAL ELECTRIC POWER PLANT,  
KYSHTYM ATOMIC ENERGY COMPLEX, USSR,

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INTRODUCTION

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This report updates [redacted] information 1/ on the Argayash Thermal Electric Power Plant (Argayash TETS, [redacted]) and is based on KEYHOLE photography of [redacted]. Detailed reports on the other principal areas in the complex have been published 2/ or are being prepared for publication by NPIC under project number J-220/63.

The excellent quality of the [redacted] photography of Argayash TETS provides details not previously discernible and permits an analysis of changes which have occurred as well as a re-

finement of building configurations and measurements (Figure 1). The boilerhouse consists of two sections: an older section which probably houses four boilers attached to one stack by flues and a newer section which probably houses five boilers connected to two stacks by flues. The newer section of the boilerhouse may be extended in the future to house an additional boiler. Newly identified buildings include a fanhouse, a possible water treatment building, a coal thawing building, and several service and maintenance buildings. Item numbers are keyed to Figure 2 and Table 1.

DETAILED DESCRIPTION

The Argayash TETS (55-38N 60-46E) located 3 nautical miles south of the Main Production Area is the principal source of both electric power and steam used in the Kyshtym Atomic Energy Complex, particularly in the Main Production Area (Figure 2 and Table 1). The power plant is separately secured and is served by at least seven rail spurs. It contains a combined boilerhouse (item 5) and generator hall (item 4), three stacks (A, B, and C), a newly identified fanhouse (item 6), a switching yard, a newly identified possible water treatment building (item 16), and several service and maintenance buildings. A newly identified coal thawing building (item 17) and a large coal yard are visible in the southern portion of the plant. The boilerhouse is approximately 595 by 100 feet and probably houses nine boilers. The locations and configurations of the flues and stacks south of the boilerhouse indicate that this building consists

of an older section at the west end which houses four boilers and a newer section at the east end which houses five boilers. Flues connect the four boilers in the old section to stack A. In the new section flues connect three of the boilers to stack B and the remaining two boilers to stack C. The flues pass through a fanhouse (item 6) containing induced draft fans. An unconnected flue section projecting from stack C may indicate that the east end of the boilerhouse will be expanded to accommodate at least one more boiler. Stacks A and B are about 210 feet apart on centers, and stacks B and C are about 185 feet apart on centers.

The generator hall (item 4), which is about 785 by 100 feet, probably houses seven steam turbogenerators since seven step-up transformers are visible in the power plant's 110-kilovolt (kv) switching yard north of the generator hall. Three, possibly four, 110-kv circuits

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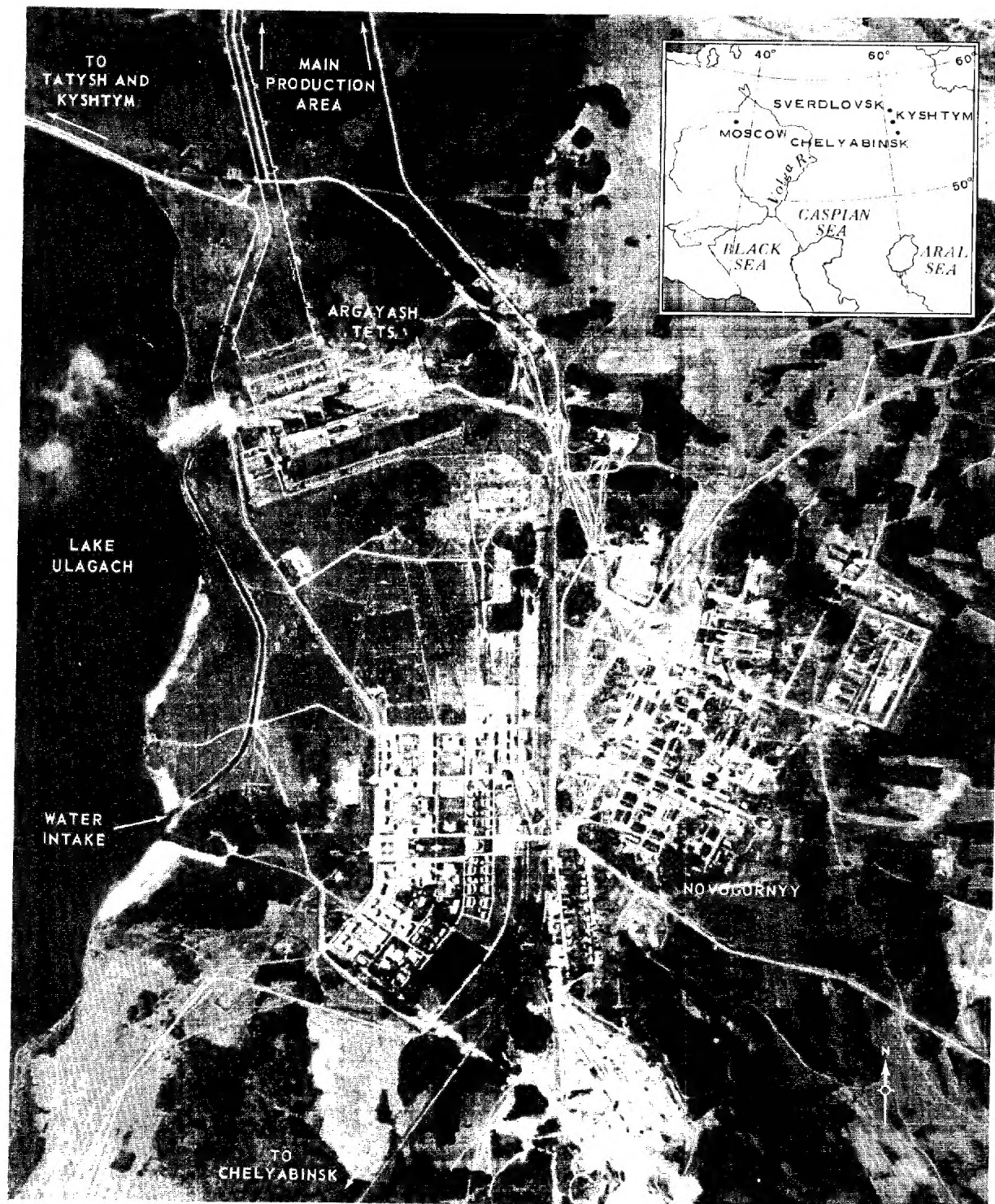


FIGURE 1. ARGAYASH THERMAL ELECTRIC POWER PLANT (ARGAYASH TETS).

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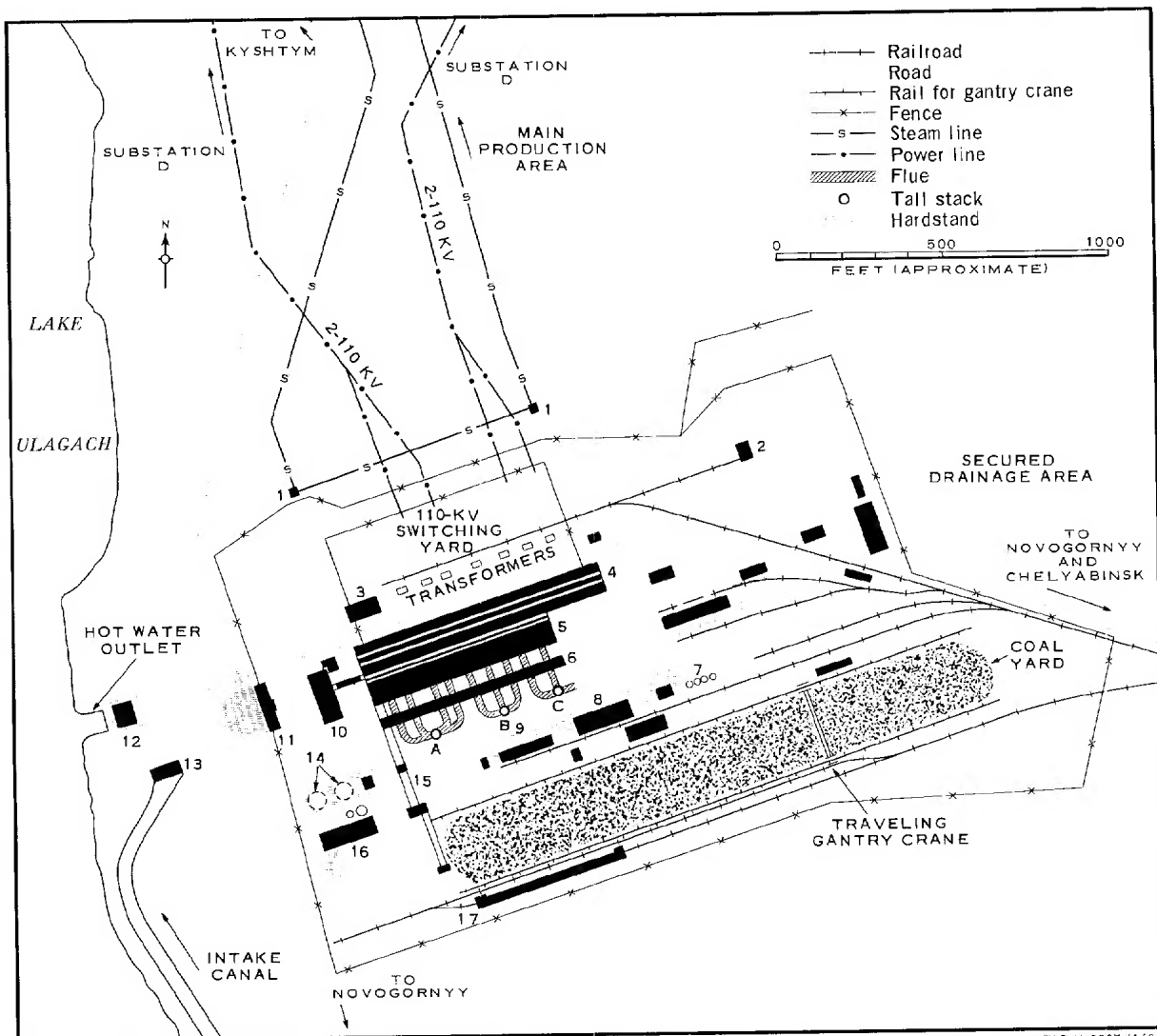


FIGURE 2. LAYOUT OF ARGAYASH TETS.

Table 1. Description of Structures at Argayash TETS  
(Item numbers are keyed to Figure 2)

Item	Description	Item	Description
1	Steam supply control valve bldg (2)	10	Administration bldg
2	Transformer maintenance bldg	11	Probable security bldg
3	Control bldg for switching yard	12	Hot-water outlet control bldg
4	Generator hall	13	Intake pumping station
5	Boilerhouse	14	Probable buried tanks
6	Fanhouse	15	Coal conveyer system
7	Possible transformer-oil storage tanks	16	Possible water treatment bldg
8	Probable machine shop	17	Coal thawing bldg
9	Probable materials storage bldg		

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supported on two 2-circuit power lines leave the separately secured switching yard and are now believed to be tied into substation D in the Chemical Processing Area. Several buildings east of the boilerhouse and generator hall may have been used during the construction of the power plant.

Steam generated by Argayash TETS is fed through two steam lines into a main control and distribution point southwest of the Main Production Area. Two steam supply control valve buildings (item 1) are located north of

the switching yard and are connected to one another by a newly identified bypass steam line. Although this bypass steam line existed at the time of the [REDACTED] KEYHOLE photography of the area, the poor quality of this photography precluded its identification. Pipe connections from the power plant to the steam supply control valve buildings are probably buried and cannot be identified on the [REDACTED] photography.

No apparent change is discernible in the previously reported hot-water circulation through Lake Ulagach which is used as a cooling pond. 1 /

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#### REFERENCES

##### PHOTOGRAPHY



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##### MAPS OR CHARTS

ACIC. US Air Target Chart, Series 200, Sheet 0164-B A, 2d ed, Jan 60, scale 1:200,000 (SECRET)

##### DOCUMENTS

- 25X1D 1. NPIC. R-103/63, Atomic Energy Complex, Kyshtym, USSR, [REDACTED] Jun 63 (TOP SECRET CHESS RUFF)
- 25X1D 2. NPIC. R-248/63, Reactor Area I, Kyshtym Atomic Energy Complex, USSR, [REDACTED] Oct 63 (TOP SECRET CHESS RUFF)
- 25X1D NPIC. R-281/63, Reactor Area II, Kyshtym Atomic Energy Complex, USSR, [REDACTED] Oct 63 (TOP SECRET CHESS RUFF)
- 25X1D NPIC. R-299/63, Reactor Area III, Kyshtym Atomic Energy Complex, USSR, [REDACTED] Nov 63 (TOP SECRET CHESS RUFF)
- 25X1D NPIC. R-352/63, Tatysh Production Area, Kyshtym Atomic Energy Complex, USSR, [REDACTED] Dec 63 (TOP SECRET CHESS RUFF)

##### REQUIREMENT

CIA. C-SI3-80,369

##### NPIC PROJECT

J-220/63 (partial answer)

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